### **Diesel Initiatives**

Recommendations for Further Consideration



Peg Hanna Workgroup Leader November 14, 2005

## Most Promising Diesel Reduction Strategies

On-Road
Non-Road
(Marine, Rail, Airport, Construction)
Stationary Engines

## On-Road Strategies: Need Financial Incentives

- State or federal grants
- Tax incentives
- Supplemental Environmental Projects (SEPs) from enforcement actions
- Target these funds/efforts to urban and non-attainment areas

### On-Road Strategies (Voluntary)

- Fleet modernization, early purchase of 2007 vehicles
- Install tailpipe retrofits (diesel particulate filters, diesel oxidation catalysts, closed crankcase filtration systems)
- Use alternative fuels (ULSD, biodiesel, etc)
- Purchase hybrid vehicles

### On-Road Strategies: Out of the Box

 Require that increases in emissions from new or existing stationary sources located in non-attainment areas be offset with emission reductions from mobile sources either at the same facility or in close proximity

### On-Road: Reduce Idling

- Expand infrastructure of electrification (IdleAire, Shurepower)
- Expand use of Auxiliary Power Units, onboard battery power for heat and A/C
- Increase driver incentives, driver training, local enforcement of idling regulations (especially urban areas)
- Phase out sleeper berth exemption

#### Non-Road: Construction Vehicles

- Fleet modernization with more efficient engines, diesel/electric hybrids
- Install tailpipe retrofits (DPFs, DOCs, etc.)
- Install idle reduction/auto shutoff technologies
- Expand use of alternate fuels (ULSD, biodiesel)
- Use state contracting process to award bonus points to companies using retrofits
- Train operators on need to reduce idling

# Non-Road: Port Strategies (NY/NJ and Camden)

- Provide financial incentives to terminal owners for cold ironing (TSE for ships)
- Fleet modernization with electric or diesel/electric hybrids
- Expand use of ULSD to dockside equipment and ships
- Gate/scheduling upgrades to reduce congestion

#### Non-Road: Locomotives

- Explore whether NJ can use idling authority for trains (like Massachusetts)
- Provide financial incentives for:
  - Onboard idle reduction units (gensets, Smartstart, etc.)
  - Expanded use of electric or hybrid diesel/electric engines

## Non-Road: Airports

- Electrify ground support equipment (voluntary or possibly mandatory)
- Replace airport shuttle buses with 2007 compliant engines
- Market based systems to offset increased air traffic

## Stationary Diesel Sources

- Finalize New Source Performance
   Standards for engine standards (permits will result in quantifiable reductions)
- Finalize NO<sub>x</sub> RACT to require permitted generators to use ULSD in 2007
- Modify General Permit for emergency generators to require ULSD for new sources

### White Papers Submitted

- Organic Waste-To-LNG/CNG Transportation Fuel Initiative (Burlington County): capture landfill gas, convert to LNG for vehicle fuel
- White Paper from Environmental Justice Alliance: mandatory retrofits of private vehicles, scrappage program, community-based PM monitoring
- Recommendation from NJ Coalition Against Aircraft Noise: airport bubble concept, emissions fees
- White Paper from Ellen Garvey regarding transit bus strategies: retrofit all NJ Transit buses with Cleaire's Longview (25% NO<sub>x</sub>, 85% PM reductions)

### State Team Members

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